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April 18, 2012

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary, Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Progeny LMS, LLC
Permitted Oral Ex Parte Presentation
WT Docket No. 11-49

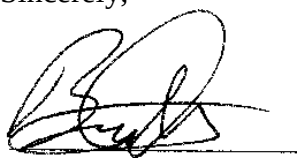
Dear Ms. Dortch:

On April 16, 2012, representatives of Progeny LMS, LLC ("Progeny") met with representatives of the Commission staff to discuss Progeny's response to comments that were filed addressing Progeny's demonstration of compliance with Section 90.353(d) of the Commission's rules. Participating in the meeting on behalf of the Commission staff were Julius Knapp, Mark Settle, and Hugh Van Tuyl of the Office of Engineering and Technology; Roger Noel, Paul Murray, Tom Peters, Paul D'Ari, and Bill Stafford of the Wireless Telecommunications Bureau; and Darryl Smith of the Public Safety and Homeland Security Bureau. Participating in the meeting on behalf of Progeny were Gary Parsons, Ganesh Pattabiraman, Ron Olexa and the undersigned.

The substance of the discussion tracked closely with the response that Progeny filed with the Commission on March 30, 2012, and also with the attached talking points, which were distributed during the meeting.

Please contact the undersigned if you have any questions.

Sincerely,



Bruce A. Olcott
Counsel to Progeny LMS, LLC

PROGENY LMS, LLC
PART 15 FIELD TEST REPORT

APRIL 2012

- Field tests conducted by Spectrum Management Consulting, Inc. demonstrate that Progeny's M-LMS network will not cause unacceptable levels of interference to Part 15 devices.
    - Very few Part 15 devices detect Progeny's M-LMS signal when used in typical user conditions.
    - All Part 15 devices continue to function in those limited cases when an M-LMS beacon is detected.
    - Part 15 devices can avoid Progeny's M-LMS signal using the same automatic and user-controlled mitigation techniques that are used in the normal course to avoid interference from other Part 15 devices.
- The "unacceptable levels of interference" requirement is intended to ensure that M-LMS networks "are not operated in such a manner as to degrade, obstruct or interrupt Part 15 devices *to such an extent* that Part 15 operations will be negatively affected."
    - Unacceptable levels of interference means harmful interference that Part 15 devices cannot withstand or avoid using the various interference mitigation techniques used by Part 15 devices to withstand or avoid interference from other Part 15 devices.
- Progeny's M-LMS network fully complies with this requirement in part through its use of techniques specifically designed to facilitate spectrum sharing with Part 15 devices.
    - Progeny is completely forgoing return path transmissions, which the Commission recognized "could present significant problems to Part 15 operations."
    - Progeny is preferentially placing its transmitters on high sites that will generally be a considerable distance from both consumer and commercial Part 15 devices.
    - Progeny is employing several techniques to reduce transmitter density, such as the use of a common broadcast signal and a low signal information rate.
    - Progeny is employing a duty cycle of no more than 20 percent, with many M-LMS transmitters operating with a duty cycle of only 10 percent.
- Claims that Progeny's network will cause unacceptable levels of interference are unfounded.
    - Itron's claim that Progeny's transmissions could overload the receivers of Part 15 devices located within 250 meters is contradicted by the test results and disregards the design of Progeny's transmitters and the antenna pattern isolation towards the ground.

  - Havens' consultant incorrectly argues the M-LMS signal level is high enough to cause failure to the physical layer operation of Part 15 receivers. Such failures would cause drop outs of the desired signal and no such drop outs were detected in any tests.

- Progeny made a concerted effort to involve a manufacturer of Part 15 devices in its test process and its efforts were flatly rejected following months of delay.
  - Progeny's use of an independent and respected RF engineering firm to manage its tests ensures the integrity of the test process and the reliability of the results.
  - Further efforts at joint testing will not change the test result and will greatly delay the public availability of Progeny's critically-important position location service.
- Exhaustive efforts were made to secure a representative sample of Part 15 device types that comprise an accurate cross section of the technologies and modulations in use today.
  - Most of the Part 15 devices employed in the tests were chosen because they use technology that is relatively susceptible to interference from other devices.
  - The Commission should not entertain Itron's suggestion that Progeny should be required to test with every model of device ever deployed.
- The test locations and conditions employed in Santa Clara County reflected typical, worst case and break case spectrum sharing conditions.
  - The test report describes 618 individual test scenarios (546 for consumer and 72 for commercial devices), each involving a different device in a different test condition.
  - All of the tests were conducted in the presence of a typical Progeny network build out.
  - Most of the Part 15 test locations were unusually close to one or more transmitters, accurately reflecting any differences that would exist in a more urban setting.
  - The Broadband Wireless System tests were in direct line of sight with an M-LMS beacon located 0.1 miles from the Access Point and 0.4 miles for the subscriber unit.
- Progeny's M-LMS network can also share spectrum with non-multilateration (N-LMS) networks in the 902-928 MHz band.
  - Most N-LMS equipment operates around 915 MHz, well below Progeny's spectrum.
  - Progeny will coordinate with any N-LMS equipment in the 919.75-921.75 MHz band pursuant to the spectrum sharing rules already in place for this purpose.
- Progeny requests prompt approval from the Commission so it can make its position location service available for public safety and consumers.